

## **STIC Biotechnology Systems Branch**

### **RAW SEQUENCE LISTING**

### **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: \_\_\_\_\_

Source: \_\_\_\_\_

Date Processed by STIC: \_\_\_\_\_

10/642, 272B  
JFW/6  
02/13/2007

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

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- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

**FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:**

**<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

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Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)**
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**
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Revised 01/10/06



IFW16

## RAW SEQUENCE LISTING

DATE: 02/13/2007

PATENT APPLICATION: US/10/642,272B

TIME: 10:09:49

Input Set : F:\Sequence Listing (Substitute) (58777.12).txt

Output Set: N:\CRF4\02132007\J642272B.raw

3 <110> APPLICANT: Hattori, Fumiyuki.  
 4 Sugimura, Keijiro  
 5 Furuya, Mayumi  
 7 <120> TITLE OF INVENTION: Therapeutic Methods and Agents for Diseases Associated with  
 8 Decreased Expression of AOP-1 Gene or AOP-1  
 10 <130> FILE REFERENCE: 58777.000012  
 12 <140> CURRENT APPLICATION NUMBER: 10/642,272B  
 13 <141> CURRENT FILING DATE: 2003-08-18  
 15 <150> PRIOR APPLICATION NUMBER: PCT/JP02/01358  
 16 <151> PRIOR FILING DATE: 2001-02-18  
 18 <150> PRIOR APPLICATION NUMBER: JP 41003/2001  
 19 <151> PRIOR FILING DATE: 2001-02-16  
 21 <160> NUMBER OF SEQ ID NOS: 32  
 23 <170> SOFTWARE: PatentIn version 3.3  
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 27 <212> TYPE: DNA  
 28 <213> ORGANISM: Homo sapiens  
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 35 agcttgacaa atttattgtg ttctggttcc agtcaagcaa aattattcag caccagttcc 180  
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 77 tagctaactt tgtctatgta tatttctaga tattgattag tgaatcgat tataaaggat 1440

Does Not Comply  
Corrected Diskette Needed  
CP8-6)

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TIME: 10:09:49

Input Set : F:\Sequence Listing (Substitute) (58777.12).txt

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86 <212> TYPE: DNA
87 <213> ORGANISM: Rattus norvegicus
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100 taaggggaaa tacttggtgc ttttcttcta ccctttggat ttcacatttg tgtgtcctac 360
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140 <211> LENGTH: 1382
141 <212> TYPE: DNA
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144 <400> SEQUENCE: 3
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147 cggaaggtt gctctggtcc tcggttgctc gtcatgcaag tgctatttcc cggagtattt 120
149 ctgcctcaac agttcttagg cctgttgctt ctagaagaac ctggttgaca gacatactgt 180
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155 agctgagctc cgacgacttt aagggaat acttggtgct tttcttctac cctttggatt 360
157 tcacatttgt gtgtcctaca gaaattgttg ctttcagtga caaagccaat gaatttcagt 420
159 atgtaaactg tgaagtagtt gcagtttcag tggattccca cttcagtcatt cttgcctgga 480
161 tcaacacacc aagaaagaat ggtggtttgg gccacatgaa catcacactg ttgtcggata 540
163 taactaagca gatatccga gactacggag tgctgttgga aagtgtggc attgcactca 600
165 gaggtctctt cattattgac cctaattgtg tcgtcaagca cctgagtgct aacgaccttc 660
167 cgggtgggcc cagtgtggaa gaaacactcc gtttggtaaa ggcgttccag tttgtagaga 720
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## RAW SEQUENCE LISTING

DATE: 02/13/2007

PATENT APPLICATION: US/10/642,272B

TIME: 10:09:49

Input Set : F:\Sequence Listing (Substitute) (58777.12).txt

Output Set: N:\CRF4\02132007\J642272B.raw

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175 attatttata gaatggcaaa acctcattat gtttgtgttt ataagtactg ctccacaggc      960
177 tttgtaattc taagacaggt tcaggctctc taaagggtggc tagctgcttc catagctgcc     1020
179 cttactaggg acttcttggt ggctaaccacaa ttctccccga gtgctttgcc cccatttctt     1080
181 ggatcatgtc cttagagggt aagcattctt tcccttagcc tgcctgaac cttggtctac     1140
183 agtgaagtag cacatagtgc cagtacttgg tgaaatgaag tagcacatag caccagcact     1200
185 taatggaagc ttctgatcaa ggtcctaaaaa ttctctcttg aatttttgtg aattatgctg     1260
187 aatttccctt tttttttttt taaacagtgt ccttggtgtg tctgaggtat tgaagaggta     1320
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195 <211> LENGTH: 256
196 <212> TYPE: PRT
197 <213> ORGANISM: Homo sapiens
199 <400> SEQUENCE: 4
201 Met Ala Ala Ala Val Gly Arg Leu Leu Arg Ala Ser Val Ala Arg His
202 1 5 10 15
205 Val Ser Ala Ile Pro Trp Gly Ile Ser Ala Thr Ala Ala Leu Arg Pro
206 20 25 30
209 Ala Ala Cys Gly Arg Thr Ser Leu Thr Asn Leu Leu Cys Ser Gly Ser
210 35 40 45
213 Ser Gln Ala Lys Leu Phe Ser Thr Ser Ser Ser Cys His Ala Pro Ala
214 50 55 60
217 Val Thr Gln His Ala Pro Tyr Phe Lys Gly Thr Ala Val Val Asn Gly
218 65 70 75 80
221 Glu Phe Lys Asp Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu Val
222 85 90 95
225 Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu Ile
226 100 105 110
229 Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys Glu
230 115 120 125
233 Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp Ile
234 130 135 140
237 Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Ala Leu
238 145 150 155 160
241 Leu Ser Asp Leu Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu Leu
242 165 170 175
245 Glu Gly Ser Gly Leu Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro Asn
246 180 185 190
249 Gly Val Ile Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg Ser
250 195 200 205
253 Val Glu Glu Thr Leu Arg Leu Val Lys Ala Phe Gln Tyr Val Glu Thr
254 210 215 220
257 His Gly Glu Val Cys Pro Ala Asn Trp Thr Pro Asp Ser Pro Thr Ile
258 225 230 235 240
261 Lys Pro Ser Pro Ala Ala Ser Lys Glu Tyr Phe Gln Lys Val Asn Gln
262 245 250 255
265 <210> SEQ ID NO: 5

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## RAW SEQUENCE LISTING

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PATENT APPLICATION: US/10/642,272B

TIME: 10:09:49

Input Set : F:\Sequence Listing (Substitute) (58777.12).txt

Output Set: N:\CRF4\02132007\J642272B.raw

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266 <211> LENGTH: 257
267 <212> TYPE: PRT
268 <213> ORGANISM: Rattus norvegicus
270 <400> SEQUENCE: 5
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273 1 5 10 15
276 Ala Ser Thr Ile Phe Arg Ser Ile Ser Ala Ser Thr Val Leu Arg Pro
277 20 25 30
280 Val Ala Ser Arg Arg Thr Cys Leu Thr Asp Met Leu Trp Ser Ala Cys
281 35 40 45
284 Pro Gln Ala Lys Phe Ala Phe Ser Thr Ser Ser Phe His Thr Pro
285 50 55 60
288 Ala Val Thr Gln His Ala Pro His Phe Lys Gly Thr Ala Val Val Asn
289 65 70 75 80
292 Gly Glu Phe Lys Glu Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu
293 85 90 95
296 Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu
297 100 105 110
300 Ile Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys
301 115 120 125
304 Glu Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp
305 130 135 140
308 Ile Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Thr
309 145 150 155 160
312 Leu Leu Ser Asp Leu Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu
313 165 170 175
316 Leu Glu Ser Ala Gly Ile Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro
317 180 185 190
320 Asn Gly Val Ile Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg
321 195 200 205
324 Ser Val Glu Glu Pro Leu Arg Leu Val Lys Ala Phe Gln Phe Val Glu
325 210 215 220
328 Thr His Gly Glu Val Cys Pro Pro Asn Trp Thr Pro Glu Ser Pro Thr
329 225 230 235 240
332 Ile Lys Pro Ser Pro Thr Ala Ser Lys Glu Tyr Phe Glu Lys Val His
333 245 250 255
336 Gln
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341 <211> LENGTH: 257
342 <212> TYPE: PRT
343 <213> ORGANISM: Mus sp.
345 <400> SEQUENCE: 6
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348 1 5 10 15
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356 35 40 45
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## RAW SEQUENCE LISTING

DATE: 02/13/2007

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TIME: 10:09:49

Input Set : F:\Sequence Listing (Substitute) (58777.12).txt

Output Set: N:\CRF4\02132007\J642272B.raw

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364 65      70      75      80
367 Gly Glu Phe Lys Glu Leu Ser Leu Asp Asp Phe Lys Gly Lys Tyr Leu
368      85      90      95
371 Val Leu Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys Pro Thr Glu
372      100      105      110
375 Ile Val Ala Phe Ser Asp Lys Ala Asn Glu Phe His Asp Val Asn Cys
376      115      120      125
379 Glu Val Val Ala Val Ser Val Asp Ser His Phe Ser His Leu Ala Trp
380      130      135      140
383 Ile Asn Thr Pro Arg Lys Asn Gly Gly Leu Gly His Met Asn Ile Thr
384 145      150      155      160
387 Leu Leu Ser Asp Ile Thr Lys Gln Ile Ser Arg Asp Tyr Gly Val Leu
388      165      170      175
391 Leu Glu Ser Ala Gly Ile Ala Leu Arg Gly Leu Phe Ile Ile Asp Pro
392      180      185      190
395 Asn Gly Val Val Lys His Leu Ser Val Asn Asp Leu Pro Val Gly Arg
396      195      200      205
399 Ser Val Glu Glu Thr Leu Arg Leu Val Lys Ala Phe Gln Phe Val Glu
400      210      215      220
403 Thr His Gly Glu Val Cys Pro Ala Asn Trp Thr Pro Glu Ser Pro Thr
404 225      230      235      240
407 Ile Lys Pro Ser Pro Thr Ala Ser Lys Glu Tyr Phe Glu Lys Val His
408      245      250      255

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411 Gln

415 &lt;210&gt; SEQ ID NO: 7

416 &lt;211&gt; LENGTH: 21

417 &lt;212&gt; TYPE: DNA

418 &lt;213&gt; ORGANISM: Artificial Sequence

420 &lt;220&gt; FEATURE:

421 &lt;223&gt; OTHER INFORMATION: Forward Primer

423 &lt;400&gt; SEQUENCE: 7

424 tgcagtttca gtggattccc a

21

427 &lt;210&gt; SEQ ID NO: 8

428 &lt;211&gt; LENGTH: 18

429 &lt;212&gt; TYPE: DNA

430 &lt;213&gt; ORGANISM: Artificial Sequence

432 &lt;220&gt; FEATURE:

433 &lt;223&gt; OTHER INFORMATION: Reverse Primer

435 &lt;400&gt; SEQUENCE: 8

436 ttcattgtggc ccaaacca

18

439 &lt;210&gt; SEQ ID NO: 9

440 &lt;211&gt; LENGTH: 28

441 &lt;212&gt; TYPE: DNA

442 &lt;213&gt; ORGANISM: Artificial Sequence

444 &lt;220&gt; FEATURE:

445 &lt;223&gt; OTHER INFORMATION: Probe

447 &lt;400&gt; SEQUENCE: 9

10/642, 272 B

pg-6

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<212> TYPE: DNA  
<213> ORGANISM: Artificial Sequence  
<220> FEATURE:  
<223> OTHER INFORMATION: :  
<400> SEQUENCE: 24  
tgcaccacca actgcttag

→ If 2237 Response is  
Artificial, Pls

19

Explain the Source of  
genetic material.

See pg-7 for  
Error Explanation

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/642,272B

DATE: 02/13/2007  
TIME: 10:09:50

Input Set : F:\Sequence Listing (Substitute) (58777.12).txt  
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Use of <220> Feature (NEW RULES):

Sequence(s) are missing the <220> Feature and associated headings.

Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)

*Error Explanation*

Seq#:24



**VERIFICATION SUMMARY**

DATE: 02/13/2007

PATENT APPLICATION: US/10/642,272B

TIME: 10:09:50

Input Set : F:\Sequence Listing (Substitute) (58777.12).txt

Output Set: N:\CRF4\02132007\J642272B.raw

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L:624 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:24, <213>  
ORGANISM:Artificial Sequence  
L:624 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:24, <213>  
ORGANISM:Artificial Sequence  
L:624 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:24,Line#:624